

ABSTRACT

Composite wear layers that include a polyethylene terephthalate wear layer adhered to an organic/inorganic (O/I) top coat layer, and surface coverings and surface covering components including the wear layers, are disclosed. The organic/inorganic top coat layer is formed from a top coat formulation which comprises a coupling agent. The coupling agent is a molecule which includes an organic polymerizable moiety such as epoxy, acrylate and the like, as well as an inorganic polymerizable moiety such as a silanol. Top coat layers formed from the top coat formulation have both organic and inorganic character. Although not limited to these thickness ranges, the wear layer is typically in the range of about 1-20 mils thickness, and the top coat layer is typically in the range of 2 microns to 0.5 mils thickness. The composite wear layers can be included in surface coverings or surface covering components, such as floor and wall coverings. An adhesion promoter/binder can be used to better adhere the polyethylene terephthalate wear layer to the organic/inorganic top coat layer.